

## **Degradation of Higher Education in Kazakhstan as an example of post-transitional crisis**

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**ABSTRACT.** It is shown, that objectives of degradation of Higher Education in most part of post-soviet countries are connected with the specific factors appeared at the economical situation appeared at the end of transitional period (transition from planned economy to market one). Decreasing of quality of higher education in such countries as Kazakhstan may be interpreted in frameworks of Baudrillard's concept of evolution of connection between "The Sign" and "The Reality"; such interpretation directly shows that overcoming of negative trends in post-soviet countries education cannot be realized by traditional administrative instruments. The problem may be solved by taking into account concepts of institutional economy.

### **1. INTRODUCTION**

Post-transitional crisis concept was used in [1] in order to interpret current situation in highest education of Kazakhstan. Simplifying, institutional crises that appear after the state's economy has completed the transition from planned to market, may be marked as post-traditional ones [2].

In the quoted paper it was shown [1], that improving the welfare of the population, as well as a significant increase of state investments in science and education, do not lead to an increase of the research activity quality or to enhance the quality of higher education. Rather, as shown in [1] on the experimental data, opposite trend is observed.

We should emphasize that the state's efforts to improve the efficiency of the higher education in the Republic of Kazakhstan are very significant. In the quoted paper, in particular, it is mentioned that «...Kazakhstan for three years has been taken place at the top four countries with the highest index of the development of education (UNESCO Institute for Education Development). We are significantly ahead of all other post-Soviet countries». Probably for this reason, a specific post-transitional crisis, mentioned in [1], affected, primarily Kazakhstan, and the analysis, presented in this paper, will be interesting for forecasting of higher education problems of the other post-Soviet states.

Observations made in [1] closely correspond to the point of view of authors of [3-6] regarding the poor state of higher education in post-Soviet states, as well as conform to the opinions expressed in the media periodically [7]: «... mismatch of what is taught with the requirements of social and practical situation can be characterized as a global crisis in higher education ». Or [8]: «... they do not teach right things to right person in a right way, moreover they do it very slowly». Problems under consideration were also touched upon [9,10] in terms of the systemic crisis of modern civilization.

Summarizing, we can say that the unsatisfactory state of post-Soviet higher education is a subject of continuous discussion now, but the real causes of the crisis are not understanding yet [11,12] in details.

So, in [4] it is noted that in Russia crisis of the higher education got particularly severe forms, because it is the only manifestation of a systemic crisis that has captured all aspects of country and societies' life. The quoted paper contains the following list of crisis signs for higher education:

- 1) discontinuity between secondary and higher education link;
- 2) lower quality of education in high schools;
- 3) lack of funding;
- 4) problem of teaching staff (aging, inefficient system of training, low salary);
- 5) universities don't communicate with the graduates and their sphere of activity;
- 6) change of students' motivation;
- 7) discrepancy between the diplomas nomenclature and labor market requirements [3].

In this terms it is relevant to emphasize that recently low efficiency of science and education of the Post-Soviet states, in particular Kazakhstan, was bound preferentially to a lack of funding and similar economic factors. The corresponding opinion is being heard now, especially in Russia and Ukraine [13]. Particularly in [4] it is mentioned that "... We should admit that not more than 50 universities in Russia are engaged in researches, and there are only 200 really scientific university schools in the whole country [5]. A conclusion made by A.A.Danilov, where he says that this is the result of unreasoned educational politics and of the approach when those 50 universities were funded prior to others, is true [6]."

Kazakhstan's experience [1] shows that problems in higher education at the end of transitional period are formed not only by financial factors. On the contrary, they lie in the sphere of institutional economics, because there were formed informal institutions that are also responsible for the high level of corruption in post-Soviet high schools.

The problem is serious, because among the large amount of critical phenomena in post-Soviet universities it is very hard to determine reasons and consequences. Moreover, it is harder to determine the level of the system called "high school", on which we should impact in order to overcome the crisis. It is obvious that if we consider the high school crisis as a demonstration of the quotient of common civilization's crisis [9, 10], the transformation must be very wide scale. Thus, it is expedient to choose a focus point and concentrates all effort on it.

A significant role in the formation of informal institutions, that can be seen as the demonstration of the crisis (in particular, shadow market of diplomas, ratings, etc as the symbol of social status and/or ways of making good career), plays inertia of mass consciousness [1]. Namely, in the cited work it was shown that in mass consciousness of young people of post-Soviet republics there was formed a stereotype that it is not prestigious to work in science and education. Moreover, it is very low prestige to have good knowledge (or professional skills).

These stereotypes [1] can be expressed by following approvals:

- Personal investments (as in the ways of applied efforts or spent money) in real technical education do not justify themselves; it is more efficient to make career of a manager.
- In order to make career of a manager it is not necessary to have special education or professional skills, because you can use corruption instruments and family ties.
- The personal status of the youth is entirely defined by the level of income, education level practically has no impact on it.

In [1] it is proved that such stereotypes do not fully reflect reality (which corresponds to the conclusions made in [2]), however they define low motivation of students to receive real knowledge.

Respectively, it is reasonable to claim that in modern conditions in Kazakhstan quite certain market is created (even if it is informal), on which there are presented symbols and attributes of the

status that really provide increase of owner's social capital, but only indirectly related to the original content, i.e. to the evidence of obtaining a certain qualification.

In conditions, when symbols or, generally, the "Signs" (in the sense given to this notion by Jean Baudrillard) are traded on "the market of the higher education", it is advisable to address to his concepts [14] in which the ratio of "Sign" and the "Reality", representing and represented, was analyzed.

In this work an attempt to analyze situation in the higher education of the Post-Soviet countries (to be more exact, in the countries where the planned economy dominated for a long time) is made on the base of concept [14,15]. The is used to find a way for overcoming the crisis phenomena of the considered type.

It is shown that, as long as the problems of the higher school of Kazakhstan (and other post-Soviet states) are not confined to the field of finance completely, then their decision should lie in a different plane - in the plane of the artificial formation of formal and mainly informal institutions, which really integrate science and education.

## 2. METHODS

### 2.1 Application of the Baudrillard's concept to Higher Education in the post-Soviet states

In accordance with [14] "Sign", which is understood as a single image or set of images, designed to reflect the processes or phenomena occurring in reality, evolving along a well-defined pattern, consisting of 4 phases.

1. The Sign is a reflection of reality.
2. The Sign distorts and mask the true reality.
3. The Sign masks the absence of a genuine reality.
4. The Sign loses connection with any reality.

Visual illustration to this scheme is the evolution, that monetary symbols undergone [16]. In the first stage of evolution "coin" itself is nothing more than a precious metal with certain mass. Images on the ingot were intended only to certify the quality of the metal and its weight. Further, with the appearance of banknotes, the image began to acquire independent meaning, which is less related to the original content. The process is almost fully reached its completion in the moment when e-cash already reflect not the existence of certain assets, but appropriate drawing rights [16], that allow anyone with the appropriate "Sign", for example, large banks, to operate in separate mode.

Taking into account the experimental results [1], it is easy to verify that such an evolutionary scheme does reflect processes occurring in the post-Soviet countries in the last century. Baudrillard's evolutionary scheme reflects a ratio of the diploma (or other evidence of professional qualification) understood as "Sign" and the educational level, understood as set of knowledge and skills ("Reality").

Another observation, which is of interest for the purpose of this work, can be done by considering phases of relations of some system and its management structures [17], which are discussed in [17] in order to give the interpretation of the concept of "corruption" in terms of a systematic approach. Namely, the evolution of relationship between managers and managed structures can also be considered on the base of analogy with the Baudrillard's evolutionary scheme:

1. Controlling elements perform "regular functions", increasing the efficiency of the system as a whole (The "Sign" reflects "Reality".)
2. Controlling elements are partially or completely converted into parasitic, deform the managed system and cause it to function in a distorted mode. ("Sign" distorts "Reality".)

3. Controlling elements lose system management capabilities, but continue to operate in a mode of obtaining resources from the source system. ("Sign" masks the absence of true "Reality").
4. Relationship between the controlling elements and a controlled system breaks fully. (The "Sign" does not correspond with the true "Reality".)

It is easy to see that such evolution of a controlling scheme took place in the field of higher education in the former Soviet Union in recent decades.

Administrative pressure on the system has increased dramatically [4,6], which, in theory, should remove negative processes. In fact, the opposite trend was realized: the abundance of bureaucratic documents required by the governing bodies, has led to the fact that a significant part of resources was "working on reporting" [4], and there are all indications that the "accountability" already exists in itself and not reflects the reality even in the slightest degree [8]. Moreover, in the terminology of [8] bureaucratic superstructure has already turned into an independent quasiorganism, goal-setting which has nothing to do with the task of increasing the effectiveness of higher education, but is aimed only at self-reproduction.

This observation shows, in particular, how difficult it is to overcome the crisis by the means of traditional administrative measures. Attempts of direct administrative intervention do not resolve crisis, but exacerbate it. We emphasize that the issue here is not in someone's evil will, but a comparison of the above two evolutionary schemes clearly shows that the post-Soviet countries are facing difficulties in an objective manner, which seems to be associated with a feature of the behavior of information flows in evolving sociosystem [18]. This again emphasizes the need to use non-traditional means, in particular, informal institutions formed artificially.

The transition from phase 1 to phase 2 in the evolutionary scheme of the administrative apparatus needs no detailed evidence. In any structure built in human society, the privilege which managers received due to their held position, inevitably lead to direct abuses or (which is more essential) to the growth of administrative structure no matter to the character of tasks it solved. For a large part of modern structures (states, corporations, etc.) transformation of an administrative subsystem in parasitic, is respectively expressed or in direct corruption (in the standard value of this term), or in the unjustified growth of bureaucracy. Eventually it starts working "for itself" owing to an overload of information channels and irreversible increase in information resistance [8,19].

Summarizing, we can say that there is a general pattern of transition from phase 1 to phase 2, but it can be expressed both in formally legitimate form, and in formally illegitimate.

Moreover, existence of two specified forms usually aggravates the considered process by the providing transition to a phase 3. Really, the tendency of the system to self-preservation forces it to find ways to suppress extreme (illegitimate) forms and this demands additional resources and additional growth of the operating device (operating part of system).

As a result, the effect analyzed in terms of the information transfer theory in [19] takes place. This effect is related to an increase in the volume of information coming from operated system to the operating levels. As shown in [19], there is a critical threshold at which control level de-facto lose the opportunity to have *systemic* impact on the behavior of the controlled system. Simplifying, the head of a corporation or state in such conditions has the opportunity to intervene in the actions of separate division, but is not able to change the nature of the system as a whole or its individual parts. In literature, including publicist one, there are described numerous events of powerlessness of the head before bureaucratic and formally subordinated to it structures. In the Russian mass media such effect is called "a mode of manual control" and is often used by management, even by the highest one.

## 2.2 The cyclical nature of the Baudrillard's evolutionary scheme

As shown above, the degeneration of the status attributes considered in the frames of analogy with Baudrillard's "Signs", is an irreversible process. Moreover, there is a reasonable assumption that the evolutionary scheme [14] is a reflection of some regularities of information behavior in any

sociosystem and, ultimately, is one of the mechanisms for ensuring the development of sociosystems as a whole [20].

At the same time, the "Sign" itself is a true attribute of a sociosystem, i.e. avoiding the usage of "Signs" makes a sociosystem unviable. Really, if we talk in terms of information theory, any sociosystem as a specific organization form of Homo Sapiens has four basic functions:

- Knowledge - the expansion in the information space.
- Education - the reproduction of already known information.
- Production - conversion of information in other types of resources, such as food.
- Management – maintenance of the information streams providing integrity of the system.

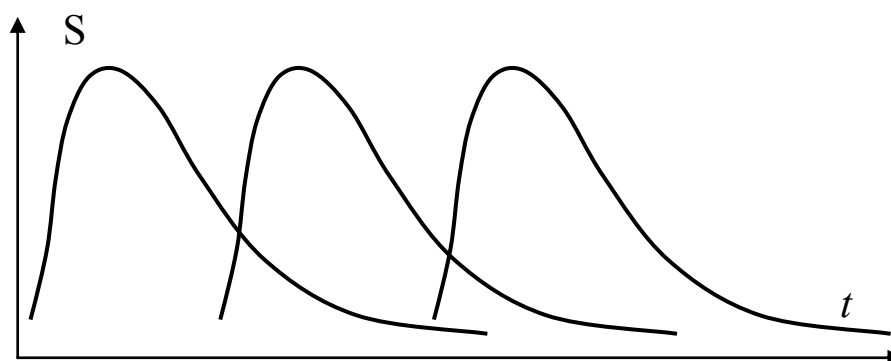
It is easy to see that all these functions are related to the processes of information processing. By definition, it is a reflection of the processes occurring in reality and therefore inseparable from the "Sign", which is understood as a reflection of reality.

Let's sum up. Society can't exist without "Sign", and at the same time its development leads to degradation of any "Sign". This inevitably makes the process of appearance and degradation of "Signs" cyclical. Signs are born and die as people or structures formed by them. "Dead signs" pull society back, but are constantly updated, sometimes being simply filled with the new contents, and this defines opportunity for development.

In this regard, the processes of macroscopic regulation in the scientific and educational space can be also interpreted from the point of view of "management of Signs" - in this case the status symbols providing increase of the social capital of the consumer (the term is used that is [21]).

The simplest form of such management is the accelerated elimination of "Dead Signs" and symbols that have finished their potential for development. Simplifying, if a particular status symbol is devaluated for especially objective reasons, there is no sense to support its existence, which, according to the evolutionary scheme [14], leads only to unjustified loss of resources. It is much more appropriate to replace it with another symbol, in full accordance with the concept of cyclical Baudrillard's evolutionary scheme mentioned above.

The simplified illustration of the cyclic birth and dying of "Signs" is presented in fig. 1.



### 3. RESULTS

#### 3.1 Some ways of overcoming of current crisis of post-soviet Highest Education

It is very difficult to realize in practice the above offered approach based on directed updating of the social status symbols, given by the higher education. All formal institutions which have developed so far in the sphere of the higher education, inertia of consciousness and all that defines high value of innovative resistance [17,18] in the academic environment will act against it either explicitly or implicitly.

The second echelon organizations that lead higher education reacting to fall of value of its corresponding status, will continue trying to fix the cause by bringing additional instruments. For example, such as the credit technology that only raises administrative load of operated system.

This trend was clearly traced earlier and will be seen in the future. So, for the last decades the document flow which has been theoretically directed to improve the quality of education, significantly increased in the Post-Soviet countries. Within the framework of used model this corresponds to increase of parameters that characterize the degree of status protection, which closes the feedback leading to transition from a stage of 2 on the Baudrillard's evolution scheme to a stage 3.

This clearly leads to an increase in the proportion of counterfeit products, in particular, diplomas, not provided by real knowledge. Increase of the "protection degree" against falsification leads to appearance of new products in the informal market. As we can see from the experience of Post-Soviet countries, the informal market immediately responds to bureaucratic initiatives with new services – the papers made by order, databases and even paid publications, etc.

In other words, any conceivable classical measures of an administrative nature will only worsen the situation, especially if we take into account the fact that the control scheme is based on the use of depreciating signs is subject to the same process itself, as it was mentioned above. This circumstance is a specific mechanism of transition from stage 3 to stage 4 in mentioned above evolution schemes.

The way out, thus, has to be based not on obviously senseless attempts to counteract naturally occurring processes that include the evolution of the relations between «Sign» and «Reality» but on the use of objective laws.

In particular, according to the above mentioned evolutionary schemes, we can conclude that to ensure a relatively stable functioning of higher education it is advisable to use a cyclic scheme of birth - the degradation of status symbols (Fig.1).

Namely, the value of a "Sign" itself is small, so in circumstances where the degree of its degradation reaches a certain critical threshold, it is advisable to accelerate the natural degradation process taking place parallel to the introduction of new "Signs".

Of particular interest is the creation of informal groups on a professional basis, participation in which will provide additional status different from a devalued diploma and partly substituting it. It should be emphasized that the formation of such informal status becomes more real due to modern information technologies, especially network resources (Internet, etc.).

Trends expressing a significant role of network resources in formation of the social capital for representatives of some professions we can already see in practice. So, there are number of network resources that allow more or less reliably determine the level of competence for persons engaged in scientific activities (services like «scholar.google.com», «ResearchGate», etc.).

For students of Kazakhstan such profiles already start playing a noticeable role at a choice of learning path, in particular the choice of the supervisor. Namely, until recently, the authority of a particular teacher was completely determined by the image created within the university in which they are trained, which often has nothing to do with real scientific achievements. Due to the existence of the above services, students have the opportunity to find out the true situation.

Further, since the Masters in any specialty obviously requires participation in scientific activity, it is quite logical creation of services of this type, but designed to assess students' participation in real scientific or industrial activity.

In Kazakhstan possibility of realization of such approach in practice is already starting. To this end, under the auspices of the National Engineering Academy of Kazakhstan an educational innovation cluster was created, where students from various universities operate and graduate (UNIC). Activity, which should result in improving the status of the persons involved in the cluster as the true professionals with proven expertise really, is being held.

Provided that such work will be continued, it is possible to raise a question of creation new – updated – a symbol of the professional status. The employer has an opportunity to estimate abilities

and qualification of the competitor of vacancy, without using the official diploma which, having become finally devaluated simply will bowl off.

In the conditions of post-industrial society where technologies of introduction of new meanings in mass consciousness are well fulfilled, such approach can be quite realistic. Moreover, it answers the general modern trends in which the category of macroscopic management of social processes of any nature is inseparably linked with generation of new meanings ("Signs") and their operated introduction in mass consciousness.

Let us emphasize that the considered concrete mechanism "Sign updating" seems more like assumption. It is possible that further research will reveal more acceptable way to overcome crisis phenomena. However, at this stage of research it is no doubt that the cyclical evolutionary scheme [14] leaves us no choice but to implement the direct search of "Sign" - a symbol of qualification status which is capable to come and replace the existing one.

#### 4. CONCLUSION

Thus, the evolutionary scheme of depreciation of any sign, first considered by Zh.Bodriyyar, receives additional support when considering the crisis in higher education in post-Soviet countries. Devaluation/degradation of the symbol designating acquisition of a certain status is irreversible process which cannot be counteracted by direct administrative methods. So, the real way out is "refreshing" of signs in a cyclic way, accompanied also by the artificial acceleration of their devaluation when reaching a certain threshold of degradation.

#### References

- [1] Shaltykova D. B., Suleimenova K. I., Suleimenov I. E., Obukhova P. V.. Post-transition period and quality of higher education: ways to overcome the crisis phenomena. *International Letters of Social and Humanistic Sciences* 8 (2013) 49-56.
- [2] Suleymenova Kamilya, « Efficacité et inefficacité de l'Etat dans les pays en transition. Cas de la Russie et de la Chine », Mémoire de Master II Recherche « Finance internationale et processus d'intégration », sous la direction de M. le Professeur Jean-Paul Guichard (2006)
- [3] Karmanova D.A. Crisis of the Russian higher education: the aspectisation problem (in Russian) *Labyrinth* 1 (2012) 78–84.
- [4] Druzhilov S. A. Higher education problems as symptoms of system crisis (in Russian) *International magazine of experimental education* 10 (2012) 8.
- [5] Bodrova E.V., Nikitina S.B. The crisis in education, search for a new paradigm of education at the turn of XX-XXI centuries (in Russian) *Site of the Moscow University of Humanities*—URL: <http://www.mosgu.ru/nauchnaya/publications/2009/professor.ru/Bodrova&Nikitina.pdf>
- [6] Danilov A.A. About the education crisis (in Russian) *Higher Education for the XXI Century: V International Scientific Conference. Moscow, (2008) Answers to questions posed by the Organizing Committee on Higher Education. International Survey, (2008) 1. M.: Publishing House of Moscow University of Humanities (2008) 28.*
- [7] Higher education: notice 2008 – 2016 (in Russian) *ONLINE expert* 32(573) (2007) URL: [http://expert.ru/expert/2007/32/vysshee\\_obrazovanie\\_2008](http://expert.ru/expert/2007/32/vysshee_obrazovanie_2008)
- [8] Pereslegin S.B. Occam's open razor. (in Russian) *M. ACT* (2011) 664.
- [9] Suleimenov I. E., Mun G. A., Grigoriev P. E., Negim E. S. M., Yeligbayeva G. Z., Suleimenova K. I.. Higher Education and Science: Portrait Against the Background of Global Crisis. *World Applied Sciences Journal* 15(9), (2011) 1199-1205.

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- [10] Suleimenov I. E., Gabrielyan O., Shaltykova D., Negim E. S. M., Obukhova P., Suleymenova K.. Current Global Crisis as a Crisis of Civilization Meta-Projects. *World Applied Sciences Journal* 23(11) (2013) 1455-1464.
- [11] Abankina I. V., Abankina T. V., Filatova L. M., Nikolayenko E. A. Restructuring the higher education in modern Russia (in Russian) *Law* 4, (2013) 99-107.
- [12] Dobryakova M., Froumin I. Higher engineering education in Russia: incentives for real change *International Journal for Engineering Education* 26 (2010) 5.
- [13] Vossenshtein H. Financial stress: Trends in higher education funding and political policy in a situation of limited means (in Russian) *University management: practice and analysis* 3 (2003).
- [14] Baudrillard J. Pour une critique de l'économie politique du signe. (1972) 268 .
- [15] Baudrillard J. La societe de consommation. Ses mythes. Ses structures. *Paris* (1974) 372.
- [16] Ivanov D. V. Virtualisation of society (in Russian) *St. Petersburg: Oriental Studies* (2000).
- [17] Shaltykova D.B., Mun G.A., Baikenov A.S., Toleuzhanov S., Suleimenov I.E. Anti-corruption schemes of management processes in higher education (in Russian) *Proceedings of International Conference V.I. Vernadsky and global problems of modern civilization - Simferopol* (2013) 208.
- [18] Suleimenov I.E., Pak I.T., Mun G.A., Tasbulatova Z., Grigorev P.E., Suleimenova K.I. Postmodern: Virtuality and higher education (in Russian) *Proceedings of the Scientific and Technical Society "KAHAK"* №4 (34) (2011) 84 - 90.
- [19] Ergozhin E.E., Suleimenova K.I., Mun G.A. Grigorev P.E., Suleimenov I.E. The global crisis in terms of the information and communication theory (in Russian) *AIPET herald*. 1 (2010), 6-11.
- [20] Suleymenova, K. I., Shaltykova, D. B., Suleimenov, I. E.. Aromorphoses phenomenon in the development of culture: a view from the standpoint of neural net theory of complex systems evolution. *European Scientific Journal*, 9(19) (2013)